

IN THE CLAIMS

1. (currently amended) A substantially pure Type II restriction endonuclease obtainable from *Bacillus thermoglucosidasius* 36A (ATCC Accession No. PTA-5292) recognizing the following base sequence in double-stranded deoxyribonucleic acid molecules:

5'-GCGATGNNNNNNNNNNØ-3' (SEQ ID NO:9)

3'-CGCTACNNNNNNNNNNNNNNN≠-5'

and having a cleavage position defined by the arrows

2. (original) A method for obtaining the Type II restriction endonuclease of claim 2, comprising cultivating a sample of *Bacillus thermoglucosidasius* 36A under conditions favoring the production of said endonuclease and separating said endonuclease therefrom.

3. (currently amended) The Type II restriction endonuclease of claim 1, wherein the restriction endonuclease is purified from *Bacillus thermoglucosidasius* 36A (ATCC Accession No. PTA-5292).